DESCRIPTIONS OF THE MALE OF *AGRILUS ESPERANZAE* KNULL AND THE FEMALE OF *AGRILUS OBLONGUS* FISHER, AND NOTES ON OTHER BUPRESTIDAE (COLEOPTERA).

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ABSTRACT

The male of *Agrilus esperanzae* Knull and the female of *Agrilus oblongus* Fisher are described, and the male genitalia of *A. esperanzae* illustrated. Additional information is provided on the distribution and biology of other North American buprestids.

Actenodes flexicaulis Schffr. 1904, Jour. New York Ent. Soc. 41:197-236. One specimen emerged from a dead branch of Granjeno, *Celtis pallida* Torr., February 18, Hidalgo County, Texas. (**new host record**)

Agrilus cupricollis Gory 1841, Mon. Bupr. Supply. 4:240, pl. 40. Previously known only from Florida, Georgia, and Texas (Wellso 1973). Collected on May 15 in Clark National Forest, Phelps County, Missouri. (**new state record**)

Agrilus egeniformis Champlain and Knull 1923, Ent. News 34:84-5. Reared from soapberry (*Sapindus drummondii* Hook & Arn.) branches, Uvalde and Frio Counties, Texas. During April through July, adults were consistently collected from the foliage of soapberry in Frio County. (**new host record**)

Agrilus esperanzae Knull 1935, Ent. News 46:96-7. Described from a female collected at Brownsville, Texas, on June 3, 1934 by J. N. Knull. Four specimens (2 males and 2 females) were collected by me on March 24 and 25, 1975, Hidalgo County, Texas. A plesiallotype male is described from this series.

Description of male; Similar to the female except (1) front of head bright green and vertex cupreous, (2) ventral surface with median line of long white recumbent hairs from prosternal lobe to middle of first abdominal segment, and (3) without concentration of white hairs on sides of third abdominal segment. Genitalia as shown in figure 1. Length 4.0mm, width 1.0mm.

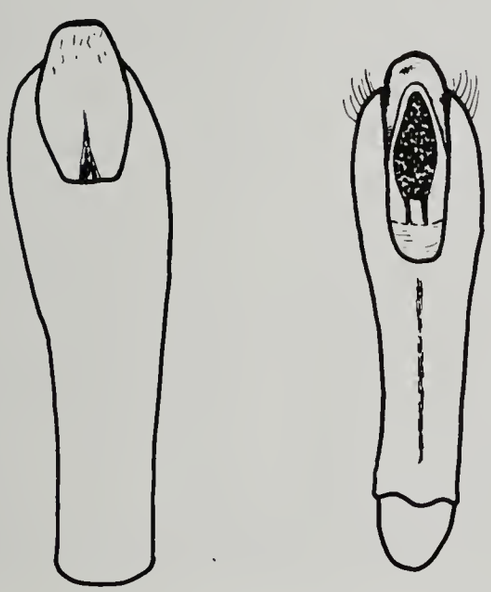

Fig. 1. Male genitalia of *Agrilus esperanzae* Knull, dorsal (left) and ventral (right) views.

Plesiallotype, male (writer's collection), Texas, northern Hidalgo County, March 24, 1975. Additional Texas specimens from Hidalgo County on April 7 and Frio County on March 29 and April 26.

Agrilus exiguellus Fisher 1928, U.S.N.M. Bull. 145:277-79. Three specimens from foliage of *Quercus* spp. south of Fort Worth, Tarrant County, Texas, May 10, 1974.

Agrilus gillespiensis Knull 1947, Ohio Jour. Science 47(2): 70-2. From foliage of *Celtis* sp., Uvalde County, Texas, April 18 and 19.

Agrilus limpiae Knull 1941, Ent. News 52:283-4. From foliage of soapberry in Uvalde, Bexar, Frio and Hidalgo counties, Texas. Collection dates ranged from March 2 in Hidalgo County to October 20 in Frio County. Adults emerged from dead soapberry branches, Frio County, from March 15 to August 28.

Agrilus neoprosopidus Knull 1938, Ohio Jour. Science 38(2):99. From foliage of Tepehuaje (*Leucaena pulverulenta* (Schlecht.) Benth.), February 2 to November 24, Hidalgo County, Texas. Adults of this species may be active all year in the Rio Grande Valley.

Agrilus oblongus Fisher 1928, U. S. Natl. Mus. Bull. 145:333-35. Previously reported only from Georgia, Maryland, and Virginia. Adults collected by sweeping along Little Piney Creek, Clark National Forest, Phelps County, Missouri, May 16. **(new state record)**

Description of female: similar to male in size and shape, but differs in the following characteristics: (1) front of head bright mahogany; body bronze, lacking the greenish coloration of the male, particularly ventrally and on the pronotum; elytra bronze, much lighter colored than the piceous male elytra; (2) feeble, broad depression along sutural margin of elytra in both sexes but female sutural depression with pubescent spot about 1/2 way from basal margin; (3) first segment of abdomen not flattened at middle; and (4) hairs on prosternum shorter and less numerous. Length, 5.3mm; width, 1.2mm.

Plesiallotype, female (writer's collection), Missouri, Phelps County, Clark National Forest, May 16, 1974.

In the 3 females examined the pubescent spots on the elytra are indistinct but indubitably present. Fisher (1928) does not note the pubescent spots on the elytra in the description of the male and I see no manifestation of it on males collected in Missouri. Due to the pubescent spots on the elytra, the female of this species would key to *A. cupreonitens* in Fisher (1928).

Agrilus obtusus Horn 1891, Trans. Amer. Ent. Soc. 18:288. *Cassia lindheimeriana* Scheele appears to be the host of this species. Adults were consistently collected from the foliage in Bexar County, Texas, from May 10 to October 24, usually from low growing plants. Adults were observed to feed on the leaves of *C. lindheimeriana* both in the field and in cages. Caged females readily laid eggs on the stems and leaves of *C. lindheimeriana*.

Egg laying in this species is uniquely complex and interesting for a buprestid. The female forms a mat of feces on the spot where the egg is to be laid. A single egg is laid near the middle of this feces mat, and exposed parts of the egg are covered by additional feces (Fig. 2). The young larvae emerge through the bottom of the egg and bore into the living plant.

Agrilus ornatulus Horn 1891 Trans. Amer. Ent. Soc. 18:319-20. Adults emerged during April from dead branches of soapberry, Frio County, Texas. Vogt (1949) reported adults from soapberry foliage, in Hidalgo County. Additional specimens were collected from soapberry foliage in the following Texas counties: Bexar, Brewster, Camanche, Colorado, Matagorda, and Tarrant. Collection dates ranged from March 22 to July 9. (**new host record**)

Agrilus scitulus Horn 1891, Trans. Amer. Ent. Soc. 18:318-19. Adults emerged from dead branches of soapberry, Frio County, Texas. Specimens were collected from the foliage of soapberry, usually within 18 inches of the ground on low growing trees, in the following Texas counties: Bexar, Camanche, Frio, Matagorda, Tarrant, and Uvalde. Collection dates ranged from March 29 to July 19. (**new host record**)

Chrysobothris analis LeConte 1859, Amer. Phil. Soc. Trans. (n.s.) 11:238. Adults emerged from the following hosts in Texas: Texas persimmon, *Diospyros texana* Scheele; soapberry, *Sapindus drummondii* Hook & Arn.; sugarberry, *Celtis laevigata* Willd.; hackberry, *Celtis occidentalis* L.; *Citrus* spp.; and Texas ebony, *Pithecellobium flexicaule* (Benth.). (**new hosts records**)

Chrysobothris beameri Knull 1954, Ohio Jour. Science 54(1):27. One male from a dead branch of skunkbush sumac, *Rhus aromatica* Ait, Chisos Mountains, Brewster County, Texas, April 27.

Fig. 2. Egg of *Agrilus obtusus* Horn laid on a stem of *Cassia lindheimeriana*.

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NOTES ON *ANEFLOMORPHA DELONGI* (CHAMPLAIN AND KNULL) (COLEOPTERA: CERAMBYCIDAE)

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On 10 September 1975 I caught 6 *A. delongi* in an ultraviolet light trap at the Archbold Biological Station, Highlands County, Florida. While collecting there again during the period 16-29 September 1976, I caught 6 more.

This species was described in 1922 from a male and a female specimen taken by D. M. DeLong at Miami, Dade County, Florida in April 1922 (Champlain and Knull 1922).

A. delongi is apparently very rare. Linsley, in his "Cerambycidae of North America" states: "This species is known to me only by the quoted description" (Linsley 1963).

It is interesting to note that whereas DeLong caught his specimens in April, mine were all caught in September. Although I have collected at the Archbold Station for 2 weeks in April each year since 1973, I have never encountered *A. delongi* during that month.

My thanks to Mr. James E. Wappes for confirming my determination of *A. delongi*.

Literature Cited

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